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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/909,597

07/20/2001

Emiko Sekimoto

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07/12/2005

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EXAMINER

GRAYBILL, DAVID E

ART UNIT

PAPER NUMBER

2822

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/909,597

Applicant(s)

SEKIMOTO, EMIKO

Examiner

David E. Graybill

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3-28-5 has been entered.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The undescribed subject matter is the language, "a space between the positioning hole and the attaching hole at one side is narrower than a diameter of either of the two holes." To further afford applicant the benefit of compact prosecution, it is noted that, "[I]t is well established that patent drawings do not define the precise proportions of the elements and may not be relied on to show particular sizes if the specification is

completely silent on the issue [as is the instant specification]." See MPEP 2125, and *Hockerson-Halberstadt, Inc. v. Avia Group Int'l*, 222 F.3d 951, 956, 55USPQ2d 1487, 1491 (Fed. Cir. 2000).

In the rejections *infra*, reference labels are generally recited only for the first recitation of identical claim language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai (5686758).

At column 9, line 64 to column 10, line 62, Arai discloses the following:

A package containing a semiconductor element comprising:  
a housing 45 containing a semiconductor element; and a pair of positioning holes 53 and a pair of attaching holes 52 respectively provided at opposed side portions of said housing; inherently wherein a line between said pair of positioning holes and a line between said pair of attaching holes intersect with each other substantially at a center of said package and further wherein the line between the positioning holes is skewed with respect to each of four

primary side walls (the four longest sides illustrated not labeled) of the housing and the line between the attaching holes is skewed with respect to each of the four primary side walls such that the line between the positioning holes and the line between the attaching holes are each neither parallel nor perpendicular to any of the primary side walls.

A semiconductor device comprising: a semiconductor element 40; a housing for containing said semiconductor element; and a pair of positioning holes and a pair of attaching holes respectively provided at opposed side portions of said housing; inherently wherein a line between the pair of positioning holes and a line between said pair of attaching holes intersect with each other substantially at a center of said package.

A semiconductor device comprising: a semiconductor element; a housing having a recess portion for containing said semiconductor element; a pair of attaching holes provided at opposed side portions of said housing at a surface of said package; and a transparent member 48 for sealing said semiconductor element in a recess portion; wherein said surface of said housing is made to be higher than a top surface of said transparent member.

A package containing a semiconductor element comprising:  
a housing 45 containing a semiconductor element; and a pair of positioning holes 53 and a pair of attaching holes 52 respectively provided at opposed

side portions of said housing; inherently wherein a line between said pair of positioning holes and a line between said pair of attaching holes intersect with each other substantially at a center of said package and further wherein the line between the positioning holes is skewed with respect to each of four primary side walls (the four longest sides illustrated not labeled) of the housing and the line between the attaching holes is skewed with respect to each of the four primary side walls such that the line between the positioning holes and the line between the attaching holes are each neither parallel nor perpendicular to any of the primary side walls, and further wherein the package is generally rectangular in shape and one positioning hole and one attaching hole is located on a first side of the package, and the second positioning hole and the second attaching hole are located on the opposite side such that the positioning holes are diametrically opposed in generally opposite quadrants of the package and the attaching holes are diametrically opposed in opposite quadrants of the package and a line generally bisecting the package in a central portion thereof separates the positioning holes and attaching holes.

Note: The illustrated centerlines (not labeled) of Arai do not necessarily coincide with the instant claimed lines, and Arai is not necessarily relied on for the disclosure of the illustrated centerlines.

To further clarify, it is inherent that straight or curved geometric elements that are generated by moving points and that have extension only along the path of the points, i.e., lines, can be generated that satisfy the particular claimed geometry. To further afford applicant the benefit of compact prosecution, it is noted that the scope of the instant claims is not limited to straight lines, nor to lines drawn from the centers of the holes.

To further clarify the disclosure of a transparent member, the member inherently allows the passage of radiation; for example, infrared radiation, therefore, it is transparent at least to infrared radiation.

To further clarify the disclosure that the surface of the housing is made to be higher than a top surface of the transparent member, it is noted that the scope of the claims is not limited to a particular frame of reference. In addition, the surface of the housing abuts and extends beyond a surface of the transparent member. Therefore, it is inherent that there is a frame of reference wherein the abutting surface of the transparent member is a top surface, and the further extending surface of the housing is made to be higher than the top surface.

However, Arai does not appear to explicitly disclose a space between the positioning hole and the attaching hole at one side is narrower than a diameter of either of the two holes.

Nonetheless, it would have been an obvious matter of design choice bounded by well known manufacturing constraints and ascertainable by routine experimentation and optimization to choose these particular dimensions because applicant has not disclosed that, in view of the applied prior art, the dimensions are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical, and it appears prima facie that the process would possess utility using another dimension. Indeed, it has been held that mere dimensional limitations are prima facie obvious absent a disclosure that the limitations are for a particular unobvious purpose, produce an unexpected result, or are otherwise critical. See, for example, *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976); *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984); *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Claims 2, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai as applied to claims 1, 3, 5 and 7, and further in combination with Kondoh (5448114).

Arai does not appear to explicitly disclose wherein said semiconductor element is a solid-state imaging element; wherein said semiconductor



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element is a solid-state imaging element; wherein said semiconductor element is a solid-state imaging element.

Nonetheless, at column 3, lines 1-13, Kondoh discloses wherein a semiconductor element 1 is a solid-state imaging element, and a transparent member 21. Moreover, it would have been obvious to combine the product of Kondoh with the product of Arai because it would provide the semiconductor element of Arai and a transparent member.

Applicant's amendment and remarks filed 3-28-5 have been fully considered, and are adequately addressed in the rejections supra.

**For information on the status of this application applicant should check PAIR:** Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Alternatively, applicant may contact the File Information Unit at (703) 308-2733. Telephone status inquiries should not be directed to the examiner. See MPEP 1730VIC, MPEP 203.08 and MPEP 102.**

Any other telephone inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Graybill at (571) 272-1930. Regular office hours: Monday through Friday, 8:30 a.m. to 6:00 p.m.  
The fax phone number for group 2800 is (703) 872-9306.



David E. Graybill  
Primary Examiner

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D.G.  
7-Jul-05